X

PROGRESS REPORT

OF

FOREST ADMINISTRATION

IN THE

ANDAMANS

FOR

1887-88.

BY

M. S. FOWLER, Esquire,
DEPUTY CONSERVATOR OF FORESTS.

WITH REMARKS BY THE SUPERINTENDENT OF PORT BLAIR

AND

ORDERS BY THE GOVERNMENT OF INDIA.

1889.

No. 181 F., dated Calcutta, the 27th February 1889.

From—Sir E. C. Buck, *Secretary to the Government of India,*
To—*The Superintendent of Port Blair and the Nicobars.*

I am directed to acknowledge the receipt of your letter No. 827, dated the 8th August last, submitting the Progress Report of Forest Administration in the Andamans for the year 1887-88, with your remarks thereon, and in reply to communicate the following observations.

2. Forest administration in the Andamans is as yet in many respects very simple. There is a large stock of mature, frequently gigantic, timber, the growth of centuries of undisturbed production; and the main question at issue is to find a profitable market for the stored-up surplus, as well as for the annual reproduction. There are as yet no Reserves, nor are they required under existing circumstances, for the islands, being the undisputed property of Government, are more or less forest-clad, and till now only 16,968 acres have been cleared for cultivation or other purposes.

For the same reason, it is not as yet necessary to maintain a Protective Staff, and fire-protection is superfluous, as the forests do not burn.

3. No Working-Plans or Plans-of-Operations have as yet been framed, nor is this necessary or even possible before the two urgent questions have been satisfactorily settled, *viz.*, how to create a steady demand for a sufficiently large quantity of the produce, and how to effect the reproduction of the more valuable species.

The latter problem is the greatest difficulty with which Forest management in mixed tropical forests has to deal; and it is probably harder of accomplishment to direct and guide reproduction within certain channels in forests where the very luxuriousness and richness of vegetation seem to overwhelm every effort, than it is to obtain satisfactory results under the opposite extremes Nevertheless, if a sufficient market be once assured, the success which has attended the artificial reproduction of Padouk indicates the measures of assisting natural reproduction which may be resorted to on a larger scale, when a more considerable and, especially, a regular income can be counted upon.

The Government of India continues to lay considerable stress on the introduction of teak into the Andamans. The experiment has so far, it is believed, succeeded, and the future value of plantations of this species in the immediate vicinity of harbours for sea-going vessels must be great.

4. The number of girdled trees in the forests is still in excess of the amount which can be extracted, both as regards the uncertainty of the market and the labour at the disposal of the Administration, and the Government of India approves of your decision in having suspended girdling operations during the year under review.

5. The clearness of the important Chapter on Yield and Working is considerably marred by the incorrectness of Form No. 56, which is inaccurate so far as it refers to the Haddo Depôt, and incomplete in regard to the Calcutta Depôt. Concerning the transactions in Calcutta, the cubic contents of the timber sold have not been given, and it is unaccountable how Mr. Carter's successor signed one of the chief forms of the Report not only without himself verifying the balancing of the account, but in the total absence of any balance above his signature.

Without the provision of a complete and correct statement in Chapter IV, the information given in the body of the Report is not sufficient to follow the transactions in Calcutta, and it will be advisable in future years to insert a statement of sales elsewhere, similar to that prepared for sales to local Departments, as contained in paragraph 29.

6. The stock of Padouk timber in Calcutta has decreased to 82 tons, whereas in London it has been raised to 643 tons by the cargo of the *Anne Main*.

7. On the sale of this stock and the subsequent establishment of a permanent home market depends to a great extent the prosperity of the Forest administration in the Andamans, and consequently the amount which may be spent on works of improvement; but, even under existing circumstances, the financial position is satisfactory, showing as it does a surplus of R41,383.

8. The Government of India is satisfied with Mr. Carter's administration during his tenure of office.

Government of India Central Printing Office.—No. 9 H. & A.—6-3-89.—250

PROGRESS REPORT OF FOREST ADMINISTRATION IN THE ANDAMANS FOR 1887-88.

No. 827, dated Port Blair, 8th August 1888.

From—COLONEL T. CADELL, V. C., *Superintendent of Port Blair and the Nicobars,*

To—The Secretary to the Government of India, Revenue and Agricultural Department.

I HAVE the honour to submit, in original, letter No. 95, dated 7th instant, from the Deputy Conservator of Forests, Port Blair, together with his Annual Report for the year 1887-88.

2. The Report, which, as explained by Mr. Fowler in the 31st paragraph, was drawn up by his predecessor, Mr. P. J. Carter, is noticeable for brevity and clearness of details. I shall, therefore, confine myself to a short summary of it.

3. Sixteen acres at Goplakabang were planted with teak and padouk, at a cost of R558. The trees were planted 4 feet apart, in rows 9 feet apart. The rows were alternately teak and padouk.

4. No girdling was done; 2,629 trees were felled, and yielded 4,198 logs and 304 planks. Of these, 382 trees, 472 logs, and 304 planks were padouk.

5. Five thousand four hundred and fifty-six logs and 286 planks were dragged to water's edge; 463 telegraph posts and 72 padouk planks were delivered to water's edge by contractors.

6. Six hundred and sixty-nine logs and 171 planks, in all 530 tons, were shipped at Shoal Bay per *Anne Main* for London.

7. One thousand four hundred and ninety-nine logs were sold to local Departments at water's edge, and 4,254 logs were floated to depôt; 3,546 logs were sold from depôt, 6 to the Indian Marine, and the balance to local Departments; 106 planks were shipped to Calcutta.

8. The balance of logs at the end of the year was—

In forest	1,300
At water's edge	442
In depôt	663

9. The Chatham Saw-Mill turned out 3,483 tea boxes (2,720 cubic feet); 15,498 cubic feet of gurjun planks and 90 cubic feet of padouk planks; 2,508 cubic feet of padouk squares; 162 cubic feet of squares of other woods; and 200 cubic feet of scantling: total 21,178 cubic feet.

10. Of the above there were exported :—

	C. ft.
Gurjun planks	15,242
744 Padouk squares	27,598
331 ,, planks	3,242
463 ,, telegraph posts	1,852
3,483 Tea boxes	2,720
14 Sundry squares	162
221 ,, scantling	200
8 Round logs	279

11. The Revenue for the year was—

	R	a.	p.
Cash	34,798	15	0
Book transfer	69,263	5	4
TOTAL	1,04,062	4	4

and the Expenditure—

	R	a.	p.
Cash	26,440	11	3
Book transfer	36,238	6	0
TOTAL . .	62,679	1	3

A profit of R8,358-3-9 on cash, and of R33,024-15-4 on book, transactions is thus shown.

12. The principal transactions of the year were—

	R	a.	p.
5,046 Round logs	75,873	3	4
Outstandings	6,609	14	0
Realized during year	69,263	5	4

but, excepting 6 logs, all were made over to local Departments and were, therefore, mere book transactions.

	R	a.	p.
14,357 cubic feet Garjun planks, at R21·63 per ton . .	6,211	6	9
463 Telegraph posts	3,490	14	0
3,559 Tea boxes, at R37·12 per ton	2,061	10	9
594 Padouk planks, at R59·00 per ton in Calcutta and R69·85 per ton in London . . .	3,962	15	11

NOTE.—Gross prices were R70-0-0 in Calcutta and £8-5-0 in London.

54 Padouk squares, at R49 per ton in Calcutta . .	2,127	3	6

NOTE.—The gross prices were R60 to R65.

13. One elephant died during the year, and there are now 19 elephants in the Settlement.

14. It is my pleasant duty to report, in conclusion, that Mr. Carter has carried on his duties during his tenure of office in the Andamans to my entire satisfaction.

No. 95; dated Port Blair, 7th August 1888.

From—M. S. FOWLER, Esq., *Deputy Conservator of Forests, Andamans,*

To—*The Superintendent of Port Blair and the Nicobars.*

I HAVE the hónour to forward the Forest Report for the year 1887-88.

2. I would invite your attention to the Government of India's No. 1137 F., dated 30th December 1886, in which it is requested that the Forest Report for 1886-87 may be submitted before the end of August 1887.

REPORT

ON THE

FORESTS OF THE ANDAMANS

FOR THE YEAR

1887-88.

CHAPTER I.

Area and Bounduries.

1. The area lost to forest during the year was 997 acres, of which 533 acres fall to the Northern District and 464 to the Southern. Of the area cleared, 133 acres were mangrove swamp. The area previously cleared was 15,971 acres, and the total area now cleared is 16,968 acres.

CHAPTER II.

Surveys, Working-Plans, and Annual Plans-of-Operations.

2. In this chapter there is nothing to record.

CHAPTER III.

Protection and Improvement.

Establishment.

3. The cost of the Establishment during the year was as follows:—

	R	a.	p.
Deputy Conservator	9,600	0	0
Office Establishment	1,008	10	10
Elephant Jemadar	413	9	6

General Protection and Breaches of Forest Law.

4. As stated in last year's Report, no protective staff is entertained. No prosecutions took place.

Forest Fires.

5. Fire-protection is unnecessary, as the forest does not burn.

Natural Reproduction.

6. Further observation has not led the Forest Officer to modify the views expressed in last year's Report with regard to the absence of natural reproduction of padouk. At the close of the year small clearings were made round seed-bearing padouk trees, with the view to these clearings being regenerated by self-sown padouk trees during the rains of 1888. The area operated on amounts to about 7 acres, and is in the vicinity of the existing plantations. The cost up to the close of the year was R138.

Artificial Reproduction.

Regular Plantations.

7. An area of 16 acres adjacent to the older plantations was cleared and planted with alternate rows of teak and padouk. The rows are 9 feet apart, and the plants in the rows are 4 feet apart. The plantation promises to be successful. The cost was R558. It would have been much less but for the fact that the work of clearing was started too late in the season, and was not completed before the rains began. In future, work should be commenced in November.

8. The lines planted in 1887 were kept weeded at a cost of R102, and in places the young padouk trees are growing well.

CHAPTER IV.

Yield and Working.

Departmental Operations.

9. No trees were girdled during the year, and, for reasons given in last year's Report, girdling will be unnecessary for years to come.

10. The number of trees felled was 2,629, and from them 4,198 logs and 304 planks were obtained. Of these, 382 trees and 472 logs and 304 planks were padouk.

11. Five thousand four hundred and fifty-six logs and 286 planks were dragged to the water's edge; 669 logs were shipped for London at Shoal Bay, in February, by the *Anne Main*; 1,499 logs were sold to local Departments at water's edge, and 4,254 logs were floated to depôt.

From depôt 3,540 logs were supplied to local Departments, and 6 to the Indian Marine; 106 padouk planks were shipped to Calcutta, and 171 to London by the *Anne Main*; 73 logs were written off as useless.

The balance of logs at the end of the year was—

In forest	234
„ at Shoal Bay	915
At Pirij	151
At water's edge	442
In depôt	663
	2,405

12. Self-supporter contractors delivered 463 telegraph posts and 72 padouk planks.

13. From the Chatham Saw-Mill were received—

	C. ft.
Gurjun planks	15,498
75 Padouk squares	2,508
54 „ planks	90
3,483 Tea boxes	2,720
9 Lakuch squares	89
1 Mowa square	26
1 Gangaw „	8
1 Marble-wood „	8
2 Chonnu squares	31
173 Gangaw scantling	150
48 Mowa „	50

14. All the above timber was exported, except 256 cubic feet of gurjun sold locally. For this timber a sum of R15,306-13-11 was paid.

15. The total exports were as follows :—

	C. ft.
Gurjun planks	15,242
744 Padouk squares	27,598
54 „ planks	90
277 „ „	3,152
463 „ telegraph posts	1,852
3,483 Tea boxes	2,720
9 Lakuch squares	89
1 Mowa square	26
1 Gangaw „	8
1 Marble-wood „	8
2 Chonnu squares	31
178 Gangaw scantling	150
48 Mowa „	50
6 Pymma logs	212
1 Lakuch log	37
1 Chonnu „	30

16. At the commencement of the year the stock in London was—

Padouk—3,572 cubic feet;

and at the close of the year—

Padouk—32,154 cubic feet.

In the above amount is included the cargo of the *Anne Main*, which is still afloat.

17. At the commencement of the year the stock in Calcutta was—

	c. ft.
Padouk	6,924
Other kinds	7,130

At the close of the year—

	c. ft.
Padouk	4,123
Other kinds	2,491

18. The cost of timber extracted by contractors was R25 per ton for planks, and R3 per post for telegraph posts.

19. The felling of 4,208 logs cost R1,243-12-0, or R0·477 per ton.

20. The sawing of 304 planks cost R1,158-0-0, or R19 per ton. The average contents of a plank were 9·7 cubic feet.

21. The dragging of 5,456 logs and 286 planks cost for—

	R	a.	p.
Labour	3,320	8	0
Elephant attendants	2,646	0	0
	5,966	8	0
Feed of elephants and cattle	9,976	0	11
Interest on value of 19 elephants, at R324 each	5,356	0	0
TOTAL	21,298	8	11

or R6·231 per ton, the average contents of a log being 31 cubic feet.

22. The floating of 3,979 logs and 358 planks cost R3,203-4-0, or R1·656 per ton.

23. The loading of the *Anne Main* at Pirij (Shoal Bay) cost R1,002-0-0.

Removal of Produce by Purchasers.

24. License-holders extracted as follows :—

25,284 cubic feet of timber.

20,000 poles; estimated outturn on 10 licenses. These poles have been assumed to contain 0·5 cubic feet each.

30,000 cubic feet of firewood, being estimated outturn on 60 licenses.

3,000 cubic feet of wood converted into charcoal; estimated outturn on 12 licenses.
168,000 bamboos; estimated outturn on 84 licenses, at 2,000 per license.
7,900 canes; estimated outturn on 79 licenses.
100,500 rattans; estimated outturn on 67 licenses.
1,504,000 thatching leaves; estimated outturn on 376 licenses.

Free Grants of Forest Produce.

25. No free grants have been made.

Produce removed under Privilege.

26. The following produce was removed by District Officers :—

18,133 cubic feet of timber.
13,140 „ „ of posts, at 10 cubic feet per post.
14,644 „ „ of poles, being 29,289 poles, at 0·5 cubic feet each.
695,858 „ „ of firewood, equal to 9,156 cords, at 128 cubic feet per cord; the cord has been estimated at 76 cubic feet solid contents.
120,000 cubic feet of firewood, being estimated consumption of 6,000 people, at 20 cubic feet per head.
24,806 cubic feet of wood converted into charcoal by District Officers; estimated amount to produce 7,752 maunds.
260,181 bamboos.
225,519 canes.
2,458,585 leaves for thatching.

Summary of Produce removed from the Forests.

27. The total amount of produce removed from the forests was as follows :—

218,611 cubic feet of timber.
2,669 „ „ telegraph posts and planks.
13,140 „ „ posts.
24,644 „ „ poles.
845,856 „ „ firewood.
27,806 „ „ wood converted into charcoal.
428,811 bamboos.
233,419 canes.
100,500 rattans.
3,962,585 thatching leaves.

CHAPTER V.

Financial Results.

28. The Revenue for the year was—

	R	a.	p.
Cash	34,798	15	0
Book transfer	69,263	5	4
TOTAL	1,04,062	4	4

The Expenditure was—

	R	a.	p.
Cash	26,440	11	3
Book transfer	36,238	6	0
TOTAL	62,679	1	3
Surplus	41,383	3	1

29. The principal transactions of the year were as follows.

Round logs, all purchased by local Departments, except six purchased by the Indian Marine—

	cubic feet.	₹	a.	p.
758 Padouk	27,692	27,691	14	3
880 Pymma	30,488	18,277	0	4
105 Lakuch	2,592	1,555	4	7
507 Tangbeng	13,110	5,243	8	4
141 Gangaw	2,813	1,125	1	7
90 Thingan	2,961	1,184	3	1
340 Thitmin	5,079	2,031	5	0
247 Mowa	6,034	2,413	10	3
24 Marble-wood	552	551	10	7
91 Chuglam	3,706	3,710	10	7
184 Khaya	4,866	973	2	8
246 Koko	7,749	1,549	12	1
1,201 Gurjun	39,458	7,891	10	7
61 Chonnu	1,893	379	11	2
5 Lalchini	209	41	14	1
138 Didu	5,026	1,005	2	11
5 Che	51	10	3	10
1 Ywegyi	20	4	0	0
1 Thingan	33	6	10	7
20 Mangrove	1,033	206	10	10
1 Boat hull		20	0	0
	TOTAL	75,873	3	4
	Outstanding	6,609	14	0
	Realized during year	69,263	5	4

30. 14,357 c. ft. of Gurjun planks, at ₹21·63 per ton . . 6,211 6 9

463 Telegraph posts 3,490 14 0

3,559 Tea boxes, at 9 annas per box, or ₹37·12 per ton . 2,061 10 9

594 Padouk planks, ₹59 per ton in Calcutta, and ₹69 85 per ton in London 3,962 15 11

Gross prices were ₹70 in Calcutta, and £8-5-0 in London.

54 Padouk squares (₹49·00 per ton in Calcutta), ₹2,127-3-6.

Gross prices were ₹60 to ₹65 per ton.

CHAPTER VI.

General Remarks.

31. With the exception of these few remarks, the present Report is entirely the work of my predecessor, Mr. P. J. Carter, Deputy Conservator of Forests. As I arrived in the Andamans after the close of the year under review, and as Mr. Carter was unable to leave until the return of the mail steamer from Rangoon, he agreed to prepare the Report of the year's work, of which I was necessarily ignorant. The most important event of the year, from a Forest point of view, was the sailing of the ship *Anne Main* for London with a cargo of padouk timber, this being the first venture in exporting timber direct from the Andamans to England.

32. One elephant died during the year, but the 19 remaining are in very fair condition, in spite of being worked the whole year round.

PORT BLAIR;
7th August 1888.

M. S. FOWLER,
Deputy Conservator of Forests, Andamans.

Form No. 49.

Area of Reserved Forests, 1887-88.

Division or Range.	Civil District or Territory.	Name of Forest.	Area on 1st April 1887.		Added during the year.	Excluded or transferred to other heads.	Area on 1st March 1888.		No. and date of Notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
Andamans	Southern District . . .	Navy Bay . . .	10	0·015	...	...	10	0·015	No. 25, dated 24th November 1883.	

Form No. 50.

Prosecutions for breaches of Forest Rules during 1887-88.

Forest Division and Civil District.	Cases pending from 1886-87.	New cases of the Year.					Total cases.	Disposed of during the year.						Cases pending at close of year.
		Injury to forest by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.		Convictions.		Acquittals.		Total.		
								Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
							Nil.							

Form No. 51.

Area of Forest Tracts protected from Fire during the dry Season 1888.

Division.	Forest Tracts.	Year in which protection commenced.	Area actually protected up to 15th June 1888.	During dry season of 1888.			Cost during the season.	Remarks.
				Area attempted to be protected.	Failures.	Actually protected.		
			Nil.	*Nil.*		*Nil.*	*Nil.*	

Form No. 52.

Area of Plantations, 1887-88.

Division.	Name of Plantation.	Area in acres.				Receipts of the year.	Charges of the year.	Remarks.
		On 1st April 1887.	Added during the year.	Excluded during the year.	Area on 31st March 1888.			
						R	R	
Andamans	Regular Plantations—							
	Navy Bay	10	...	...	10	...	...	
	Goplakabang	33	16	...	49	...	558	
	Cultural Operations—							
	Dhani Khari	...	...	...	.	...	...	Area indeterminate.
	Goplakabang, lines	...	...	...	...		102	Ditto ditto.
	„ , seed clearing	...	...	...	...	...	138	Area about 7 acres.
	Total	43	16	...	59	...	798	

Form No. 53.

Trees felled or girdled by Government Agency during the year 1887-88 (Selection fellings).

Division.	Trees felled or girdled.		Remarks.
	Description.	Number.	
Andamans	Padouk	382	
	Pyimma	355	
	Lakuch	52	
	Toungbeing	179	
	Gangow	198	
	Thingan	50	
	Thitmin	346	
	Mowa	106	
	Marble-wood	70	
	Chuglum	61	
	Khaya	112	
	Koko	111	
	Gurjun	424	
	Didu	32	
	Mangrove	29	
	Chonnu	69	
	Lalchini	8	
	Ywegyi	5	
	Thingan, red	2	
	Lettouk	6	
	Thabye	15	
	Palawa	1	
	Lingyow	6	
		2,619	Converted into 4,198 logs, 304 planks.

Balance at commencement of year—

In forest		1,474		Issued locally		1,499
„ Shoal Bay		915		Sent to sale depôt		4,255
„ forest depôts		453		Shipped to London from Shoal Bay		653
„ Shoal Bay		820		Balance at close of year—		
		3,662		In forest	234	
Outturn of year	logs	4,198		„ Shoal Bay	915	
	planks	304		„ Forest depôts	441	
		8,164		„ Shoal Bay	167	
						1,757
						8,164

Form No. 54.

Outturn of Timber and Firewood during the year 1887-88

Division.	Description of Materials.	Outturn in cubic feet.								Remarks.
		Selection fellings.	Clearances.	Thinnings.	Total.	Removed by				
						Government Agency.	Purchasers.	District Officers.	Right-holders.	
Andamans	Timber	218,611	...	...	218,611	*175,194	†25,284	18,133	...	
	Telegraph posts and planks	2,669	...	..	2,669	‡2,669	...	...	...	
	Posts	13,140	...	...	13,140	...	...	§13,140	...	
	Poles	24,644	...	...	24,644	...	10,000	‖14 644	...	
	Firewood	150,000	695,856	...	845,856	...	**30,000	¶695,856	††120,000	
	Charcoal	3,000	24,806	...	27,806	...	‡‡3,000	§§24,806	...	
		412,064	720,662	...	1,132,726	177,863	68,284	766,579	120,000	

* Department—4,255 logs = 117,246 cubic feet.
1,500 „ = 57,948 „ „

Total . 175,194 cubic feet.

† License-holders—25,284 cubic feet.

‡ Self-supporter Contractors—2,669 cubic feet.

§ Southern District—1,314 posts @ 10 cubic feet per post = 13,140 cubic feet.

‖ 10 Licenses @ 2,000 poles per license = 20,000 poles, each 0·5 cubic feet = 10,000 cubic feet.
Southern District . . . 27,471 „ „ 0·5 „ „ = 13,735 „ „
Northern „ . . . 1,818 „ „ 0·5 „ „ = 909 „ „

Total . 14,644 cubic feet.

¶ Northern District—4,945 cords @ 76 c. ft. per cord = 375,820 c. ft.
Southern „ 4,211 „ @ 76 „ „ 320,036 „

Total . 695,856 c. ft.

** 60 Licenses @ 500 c. ft. per license = 30,000 c. ft.

†† 6,000 Licenses (free and to self-supporters), annual consumption of each 20 c. ft. = 120,000 c. ft.

‡‡ 12 Licenses @ 250 c ft. per license = 3,000 c. ft.

§§ Northern District—24,806 c. ft. of wood estimated to produce 7,752 maunds or 620,160lb of charcoal.

Form No. 55.

Outturn of Minor Forest Produce during the year 1887-88.

Division.	Description of Produce	PRODUCE REMOVED OR UTILIZED.										Remarks.
		By Government Agency.		By Purchasers.		By Free Grants.		By District Officers.		Total.		
		Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	
			₹		₹		₹		₹		₹	
Andamans	Bamboos	...	...	168,000	84	...	...	*260,181	124	428,181	208	
	Canes	...	...	7,900	40	...	...	†225,519	1,125	233,419	1,165	
	Rattans	...	...	100,500	134	...	...	...	...	100,500	134	
	Thatch	...	...	1,504,000	188	...	...	‡2,458,585	310	3,962,585	498	
	Betel leaves	...	...	...	8	...	...	...	...	...	8	
	Total	...	...	1,780,400	454	...	...	2,944,285	1,559	4,724,685	2,013	

Bamboos, 2,000 per license.
Rattans 1,500 „ „
Thatch 4,000 „ „

* Northern District . 60,381
Southern „ . 1,99,800
Total . 260,181

† Northern District . 11,500
Southern „ . 214,019
Total . 225,519

‡ Northern District . 44,355
Southern „ . 2,414,230
Total . 2,458,585

Form No. 56.

Account of Timber and other Produce cut or collected by Government Agency and brought to Sale Depôts or sold locally during the year 1887-88.

Particulars.	No. or quantity.	Cubic feet.	Total of each head. No. or quantity.	Total of each head. Cubic feet.
Balance at commencement of the year—				
Haddo Depôt—				
Padouk logs	65	...	...	...
Pyimma „	6	...	...	...
Lakuch „	1	...	...	...
Toungbeing „	39	...	...	...
Gangow „	12	...	...	...
Thingan „	4	...	...	...
Thitmin „	8	...	...	...
Mowa „	1	...	...	...
Chuglum „	1	...	...	...
Koko „	3	...	...	...
Gurjun „	36	...	...	...
Didu „	13	...	...	...
Mangrove „	13	...	...	...
Thingan Red „	1	...	...	...
Che „	9	...	...	...
Padouk crooks	20	...	...	...
			232	5,568
Calcutta Depôt—				
Padouk scantlings	1,754	1,039	...	...
„ „	500	62	...	...
„ planks	971	4,621	...	...
„ squares	57	1,264	...	...
„ telegraph posts	100	365	...	...
Koko planks	347	1,577	...	...
Chuglum „	20	170	...	...
Marble-wood planks	13	52	...	...
Gurjun „	158	1,001	...	...
„ spars	18	1,761	...	...
Sleepers	615	2,142	...	...
			4,553	14,054

Particulars.	No. or quantity.	Cubic feet.	Total of each head. No. or quantity.	Total of each head. Cubic feet.
Sold from Haddo Depôt—				
Padouk logs	582	18,346	...	...
„ crooks	8			
Pyimma logs	353	9,421	...	...
Lakuch „	39	720	...	...
Toungbeing „	360	8,195	...	...
Gangow „	141	2,813	...	...
Thingan „	20	475	...	...
Thitmin „	339	5,050	...	...
Mowa „	154	2,952	...	...
Marble-wood „	14	263	...	...
Chuglum „	1	23	...	...
Khaya „	66	951	...	...
Koko „	94	2,414	...	...
Gurjun „	1,201	39,458	...	...
Didu „	138	5,026	...	...
Mangrove „	20	1,033	...	...
Chonnu „	8	168	...	...
Lalchini „	1	30	...	...
Thingan Red „	1	33	...	...
Ywegyi „	1	20	...	...
Che „	5	51	...	...
			3,546	97,443
Useless logs written off—				
Toungbeing	2	...	...	...
Thitmin	66	...	...	...
Marble-wood	1	...	...	...
Khaya	1	...	...	...
Koko	1	...	...	...
Chonnu	1	...	...	...
Lingyow	1	...	...	...
			73	1,121

Account of Timber and other Produce cut or collected by Government Agency and brought to Sale Depôts or sold locally during the year 1887-88—continued.

Particulars.	No. or quantity.	Cubic feet.	Total of each head. No. or quantity.	Total of each head. Cubic feet.
London Depôt—				
Padouk squares	41	1,055	...	...
„ planks	525	2,517	566	3,572
Total Balance	...	...	5,351	23,194
Received from the Forest in Haddo Depôt—			...	...
Padouk logs	554	...	...	...
Pyimma „	425	...	...	...
Lakuch „	40	...	...	...
Toungbeing „	349	...	...	...
Gangow „	248	...	...	...
Thingan „	63	...	...	...
Thitmin „	404	...	...	...
Mowa „	160	...	...	...
Marble-wood „	60	...	...	...
Chuglum „	15	...	...	...
Khaya „	72	...	...	...
Koko „	111	...	...	...
Gurjun „	1,248	...	...	...
Didu „	125	...	...	...
Mangrove „	24	...	...	...
Thabye „	9	...	...	...
Chonnu „	18	...	...	...
Lalchini „	9	...	...	...
Lingyow „	10	...	...	...
Thingan Red „	3	...	...	...
Palawa „	1	...	...	...
Ywegyi „	6	...	...	...
Nobé „	1	...	...	...
Lettouk „	13	...	...	...
Bombwai „	1	...		
Padouk planks	286	...		
„ „	72	...		
			4,327	118,063

Particulars.	No. or quantity.	Cubic feet.	Total of each head. No. or quantity.	Total of each head. Cubic feet.
Transferred to London—				
Padouk planks	171	1,897	171	1,897
Transferred to Calcutta—				
Padouk planks	106	1,255	106	1,255
Brought from Forest and sold locally—				
Padouk logs	168	9,346	...	...
Pyimma „	527	21,067	...	...
Lakuch „	66	1,872	...	...
Toungbeing „	147	4,915	...	...
Thingan „	70	2,486	...	...
Thitmin „	1	28	...	...
Mowa „	93	3,082	...	...
Marble-wood „	10	289	...	...
Chuglum „	90	3,683	...	...
Khaya „	118	3,915	...	...
Koko „	152	5,335	...	...
Chonnu „	53	1,731	...	...
Lalchini „	4	179	...	...
Boat log	1	20	1,500	57,948
Sold in Calcutta—				
Telegraph posts	463	1,852	463	1,852
Received from Chatham and sold locally—				
Gurjun planks	...	256	...	25
Received from Chatham and sold in Rangoon—				
Gurjun planks	2,091	12,012	2,091	12,012

Brought from Forest and sold locally—				
Padouk logs	168	9,346		
Pyimma „	527	21,067		
Lakuch „	66	1,872		
Toungbeing „	147	4,915		
Thingan „	70	2,486		
Thitmin „	1	28		
Mowa „	93	3,082		
Marble-wood „	10	289		
Chuglum „	90	3,683		
Khaya „	118	3,915		
Koko „	152	5,335		
Chonnu „	53	1,731		
Lakhini „	4	179		
Boat log	1	20		
			1,500	57,948
Cut by Contractors—				
Telegraph posts	463	1,852		
			463	1,852
Received from Chatham Saw Mill—				
Gurjun planks	2,640	15,242		
„ „	...	256		
Padouk squares	75	2,508		
Tea boxes	3,483	2,720		
Padouk planks	54	90		
Lakuch squares	8	75		
„ „	1	14		
Mowa square	1	26		
Gangow „	1	8		
Marble-wood square	1	8		
Chonnu „	2	31		
Gangow scantlings	173	150		
Mowa „	48	50		
			6,487	21,178
Received in Calcutta Depôt—				
Padouk planks	106	1,255		
„ squares	75	2,508		
Gurjun planks	549	3,230		
			730	6,993
Brought from Forest and shipped to London—				
Padouk squares	669	25,090		
			669	25,090
Shipped to London from Haddo Depôt—				
Padouk planks	171	1,897		
			171	1,897
Transferred from Calcutta to London—				
Padouk planks	800	3,783		
Koko „	305	1,384		
			1,105	5,167

Received from Chatham and sent to Calcutta Depôt—				
Gurjun planks	549	3,230		
Padouk squares	75	2,508		
			624	5,738
Received from Chatham and sold in Calcutta—				
Tea boxes	3,483	2,720		
Padouk planks	54	90		
Lakuch squares	8	75		
„ „	1	14		
Mowa squares	1	26		
Gangow „	1	8		
Marble-wood „	1	8		
Chonnu „	2	31		
Gangow scantling	173	150		
Mowa „	48	50		
			3,772	3,172
Sold from Calcutta Depôt—				
Padouk squares	52	...		
„ planks	86	...		
„ scantling	2,254	...		
Gurjun planks	707	4,231		
„ spar	1	...		
Sleepers	477	...		
			3,577	
Sold from London Depôt—				
Padouk squares	41	1,055		
„ planks	525	2,517		
			566	3,572
Transhipped from Calcutta to London—				
Padouk planks	800	3,783		
Koko „	305	1,384		
			1,105	5,167
Balance in London Depôt (in transit)—				
Padouk squares	669	25,090		
„ planks	171	1,897		
„ „	800	3,783		
Koko „	305	1,384		
Balance in Calcutta Depôt—			1,945	32,154
Padouk squares	77	1,889		
„ planks	187	1,884		
„ telegraph posts	100	365		
„ planks	85	350		
Gurjun spars	17	1,711		
Koko planks	42	193		
Chuglum „	20	170		
Marble-wood planks	13	52		
			541	6,614

Account of Timber and other Produce cut or collected by Government Agency and brought to Sale Depôts or sold locally during the year 1887-88—concluded.

Particulars.	No or quantity.	Cubic feet.	Total of each head.	
			No. or quantity.	Cubic feet.
Calcutta Discrepancies—				
Padouk planks	81		81	
Grand Total .	...	...	20,884	261,382

Particulars.	No. or quantity.	Cubic feet.	Total of each head.	
			No. or quantity.	Cubic feet.
Balance in Haddo Depôt—				
Padouk logs	37			
Pyimma „	78			
Lakuch „	2			
Toungbeing „	26			
Gangow „	119			
Thingun „	47			
Thitmin „	7			
Mowa „	7			
Marble-wood „	45			
Chuglum „	15			
Khaya „	5			
Koko „	19			
Gurjun „	83			
Mangrove „	17			
Thabyai „	9			
Chonnu „	9			
Lalchini „	8			
Lingyow „	9			
Red Thingan „	3			
Palawa „	1			
Ywegyi „	5			
Nobé „	1			
Lettouk „	13			
Ché „	4			
Bombwai „	1			
Padouk crooks	12			
„ planks	81			
			663	16,626
Calcutta Discrepancies—				
Padouk squares	3			
Sleepers	138		141	
	...	...	20,884	...

Form No. 57.

Abstract showing the Value of Timber and other Produce at Sale Depôts for the year 1887-88.

Description of Timber and other produce.	On hand at commencement of the year.			On hand at close of the year.			Difference in Value.		Remarks.
	No.	C. ft.	Value.	No.	C. ft.	Value.	In favor of the year.	Against the year.	
			R			R	R	R	
LOCAL DEPÔT—									
Logs	232	5,568	2,784	663	...	7,956	5,172		
LONDON—									
Squares . . .	41	1,055	1,055	669	25,090	25,090	24,035		
Planks	525	2,517	2,517	971	5,680	5,680	3,163		
Koko planks . . .	...	...	...	305	1,384	600	600		
CALCUTTA—									
Scantlings . . .	1,754	1,039	416	...	...	...	...	416	
Planks . . .	971	4,621	4,621	272	2,234	2,234	...	2,387	
Sleepers . . .	615	2,142	...	...	...	...	...	...	
Spars	18	1,761	2,000	17	1,711	1,800	...	200	
Squares . . .	57	1,264	1,264	77	1,889	1,889	625	...	
Koko planks . .	347	1,577	630	42	193	30	...	600	
Chuglum . . .	20	170	68	20	170	68	...	...	
Marble-wood . . .	13	52	20	13	52	20	...	...	
Scantling . . .	500	62	24	...	...	...	...	24	
Gurjun planks . .	158	1,001	300	...	...	...	...	300	
Telegraph posts . .	100	365	...	100	365	...	...	...	
TOTAL .	5,351	23,194	15,699	3,149	38,768	45,367	33,595	13,927	

Abstract showing the Value of Live-stock for the year 1887-88.

Description.	On hand at commencement of year.		On hand at close of year.		Difference in Value.		Remarks.
	No.	Value.	No.	Value.	No.	Value.	
		R		R		R	
Elephants	20	50,000	19	47,500	...	2,500	

Form No. 58.

Summary of Revenue and Expenditure of the Andamans Forest Department during 1887-88.

REVENUE.

	₹	a.	p.
I.—Timber and other produce removed from the Forests by Government Agency :—			
a. Timber	1,02,945	7	7
b. Firewood and charcoal	...		
c. Bamboos	...		
d. Sandal-wood	...		
e. Grass and other minor produce	...		
II.—Timber and other produce removed from the Forests by Consumers or Purchasers :—			
a. Timber	587	8	9
b. Firewood and charcoal	75	12	0
c. Bamboos	84	0	0
d. Grazing and fodder grass	...		
e. Other minor produce	369	8	0
III.—Confiscated Drift and Waif Wood—, and confiscated forest produce :—	...		
IV.—Revenue from Forests not managed by Government :—			
a. Duty on foreign timber and other forest produce	...		
b. Revenue from shared and private forests	...		
V.—Miscellaneous :—			
a. Fines and forfeitures	...		
b. Refunds	..		
c. Other sources	...		
Total Revenue	1,04,062	4	4

EXPENDITURE.

A.—Conservancy and Works.

I.—Timber and other produce removed from the Forests by Government Agency :—			
a. Timber	34,039	6	6
b. Firewood and charcoal	...		
c. Bamboos	...		
d. Sandal-wood	...		
e. Grass and other minor produce	...		
II.—Timber and other produce removed from the Forests by Consumers or Purchasers :—	...		
III.—Drift and Waif Wood, and confiscated Forest Produce :—	...		
IV.—Revenue from Forests not managed by Government :—			
a. Duty on foreign timber and other forest produce	...		
b. Revenue from shared and private forests	...		
V.—Rent of leased Forests and payments to Shareholders in Forests managed by Government :—	...		
VI.—Live-stock, Stores, Tools and Plant :—			
a. Purchase of cattle	...		
b. Feed and keep of cattle	9,976	0	11
c. Purchase of stores, tools and plant	1,563	9	6
VII.—Communications and Buildings :—			
a. Roads and bridges	...		
b. Buildings	...		
c. Other works	...		
Carried forward	45,579	0	11

	R	a.	p.
Brought forward .	45,579	0	11
VIII.—Demarcation, improvement, and extension of Forests :—			
a. Demarcation	...		
b. Compensation for land and rights	...		
c. Surveys and working plans	...		
d. Sowing and planting	798	0	0
e. Protection from fire	...		
f. Other works	...		
IX.—Miscellaneous :—			
a. Refunds	40	10	5
b. Law charges	...		
c. Other charges	5,269	2	11
Total A. Conservancy and Works .	51,686	14	8
B.—Establishments.			
I.—Salaries :—			
a. Conservators	...		
b. Superior officers	9,600	0	0
c. Subordinate forest and depôt establishments	...		
d. Office Establishments	...		
e. Deputation and special allowances	...		
II.—Travelling Allowances :—			
a. Conservators	...		
b. Superior officers	1,200	0	0
c. Subordinate forest and depôt establishments	...		
d. Office establishments	...		
III.—Contingencies :—			
a. Stationery	...		
b. Carriage of tents and records	...		
c. Rents, rates, and taxes	...		
d. Pay of police guards	...		
e. Official postage	17	1	0
f. Sundries	175	2	0
Total B. Establishments .	10,992	3	0
Grand Total of Expenditure .	62,679	1	3

Calcutta,
1st June 1888.

JAMES TAYLOR,
Asst. Comptroller General (Forests).

Form No. 59.

Dr. *Account Current for the year 1887-88.* Cr.

	R	a.	p.		R	a.	p.
To Cash Balance	8	0	0	By Expenditure as per Annual Summary Form No. 58	62,679	1	3
„ VIII.—Assessed Taxes—				„ Forest Cash Remittances—Local—			
Income Tax—Deductions from Salaries	250	0	0	Remittances to Treasuries	29,620	14	10
„ Revenue as per Annual Summary, Form No. 58	1,04,062	4	4				
				„ Suspense	1,289	9	2
„ Forest Cash Remittances—Local—				„ Account Current (other Governments)—			
Forest cheques drawn	26,717	11	3	Remittances to the Government of North-Western Provinces and Oudh	59	10	2
„ Suspense	1,289	9	2	„ „ Burma	5,094	0	0
„ Inter-Departmental Transfers—				„ Inter-Departmental Transfers—			
Civil Department	36,383	10	0	Public Works Department, Military Works	24	6	0
				Civil Department	69,800	15	4
				„ Cash Balance	142	10	0
TOTAL	1,68,711	2	9	TOTAL	1,68,711	2	9

CALCUTTA,
1st June 1888.

JAMES TAYLOR,
Asst. Comptroller General (Forests).

Form No. 60.

Revenue received and Outstandings on account of Revenue during 1887-88.

Division.	Particulars.	Outstanding.	Sold and paid for during year.	Sold and not paid for during year.	Outstandings at commencement of year.	Value of sales and other revenue during year.	Total.	Amount realised during year.	Balance due to the Department at end of year.	Remarks.
					R a. p.	R a. p.	R a. p.	R a. p.	R a. p.	
Andamans . . Ia	Padouk squares	8	45	47	232 11 6	3,411 1 4	3,643 12 10	2,127 3 6	1,516 9 4	
	„ planks	17	577	34	116 12 9	3,996 3 2	4,112 15 11	3,962 15 11	150 0 0	
	„ scantlings	5,670	268	1,986	196 9 0	891 9 0	1,088 2 0	308 2 0	780 0 0	
	Sleepers	269	477	...	243 4 9	270 11 6	514 0 3	514 0 3	.....	
	„	65	...	...	150 0 0	.....	150 0 0	.....	150 0 0	
	Lakuch squares	14	...	...	179 9 6	.....	179 9 6	.....	179 9 6	
	Tindu billets	212	...	...	248 12 0	.....	248 12 0	248 12 0	.....	
	Gangow „	12	...	...	30 0 0	.....	30 0 0	30 0 0	.....	
	Gurjun spars	1	...	1	203 3 6	200 0 0	403 3 6	203 3 6	200 0 0	
	„ planks	895	13,462	3,037	375 0 0	8,036 6 9	8,411 6 9	6,211 6 9	2,200 0 0	
	Telegraph posts	...	463	...	.....	3,490 14 0	3,490 14 0	3,490 14 0	.....	
	Tusks	...	10	...	.....	1,644 3 9	1,644 3 9	1,644 3 9	.....	
	Tea boxes	...	3,559	...	.....	2,061 10 9	2,061 10 9	2,061 10 9	.....	
	Padouk planks	...	...	...	.....	45 0 0	45 0 0	24 6 0	20 10 0	
	Sundry squares	...	4	...	.....	47 2 2	47 2 2	47 2 2	.....	
	Round logs from depôts . . .	...	...	...	.....	75,874 8 0	75,874 8 0	69,263 5 4	6,611 2 8	
	Local sales	...	...	...	4 0 0	.....	4 0 0	4 0 0	.....	
	Unremitted revenue, 1885-86 and 1886-87.	...	...	...	13,228 14 6	.....	13,228 14 6	12,804 1 8	424 12 10	
	Emmett and Chambers . . .	...	...	...	2,624 13 8	.....	2,624 13 8	.....	2,624 13 8	
	Gangow and mowa	...	...	...	.....	236 11 9	236 11 9	.....	236 11 9	
IIa	Timber	...	...	...	.....	587 8 9	587 8 9	587 8 9	.....	
b	Firewood and charcoal . . .	...	...	...	.....	75 12 0	75 12 0	75 12 0	.....	
c	Bamboos	...	...	...	.....	84 0 0	84 0 0	84 0 0	.....	
e	Other minor produce	..	...	...	.....	369 8 0	369 8 0	369 8 0	.....	
	TOTAL .	...	...	...	17,833 11 2	1,01,322 14 11	1,19,156 10 1	1,04,062 4 4	15,094 5 9	

Form No. 61.

Outstandings and Liabilities on account of Contractors and Disbursers for 1887-88.

Division.	Department Debtor.			Department Creditor.			Balance Due.		Remarks.
	At commencement of year.	Recoveries in cash and value of supplies and work done during the year.	At close of year.	At commencement of year.	Payments made during year.	At close of year.	To Department (Outstandings).	By Department (Liabilities).	
	Nil.		*Nil.*	*Nil.*		*Nil.*	*Nil.*	*Nil.*	
Total .									

Form No. 62.

Financial results of the year 1887-88.

Division.	Timber and other produce removed from the forests by Government Agency.		Other Revenue.		Formation, protection and improvement of forests.	Total.		Remarks.
	Receipts.	Charges.	Receipts.	Charges.	Charges.	Receipts.	Charges.	
Andamans—	₹	₹	₹	₹	₹	₹	₹	
Cash	33,682	26,441	1,117	...	...	34,799	26,441	
Book transfer	69,263	35,440	...	...	798	69,263	36,238	
Total .	1,02,945	61,881	1,117	..	798	1,04,062	62,679	

M. S. FOWLER,
Deputy Conservator of Forests, Andamans.

Government of India Central Printing Office—No. 140 R. & A.—8-11-88.—280.